

## **ABSTRACT**

A comparator with hysteresis which achieves fast switching despite a low current consumption. The comparator comprises a first transistor (M1) and a second transistor (M2) whose gates form the inputs of the comparator. The main current paths of both transistors are connected to each other at one end, with a third transistor (M3) and a fourth transistor (M4) being provided. The gate of the third transistor is connected to the gate of the first transistor and its main current path is circuited between the one end of the main current paths of the first and second transistor and is connected via the main current path of the fourth transistor to the other end of the main current path of the second transistor. The gate of the fourth transistor is connected to the output signal or inverted output signal of the comparator. The comparator in accordance with the invention may be put to use e.g. in an ASK demodulator such as those used in RFID transponders.